

STANFORD UNIVERSITY
DEPARTMENT OF STATISTICS
DEPARTMENTAL SEMINAR

3:15 p.m., Wednesday, October 24, 2007
Building 380, Room 380-C

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Causal inference and networks

In this talk I would like to explore the relations between causal inference and network estimation, two areas that have received enormous attention in recent years. Some network models, such as those used to represent social interaction or internet traffic, are mainly descriptive in nature. In contrast, some classes of probabilistic networks have been widely used to represent causal relations among variables. What are the differences among the different classes of network models, and what types of data can support statistical inference on causal relations? Finally, what are some of the methodological challenges in the inference of causal networks?